(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 14 July 2005 (14.07.2005)

PCT

(10) International Publication Number WO 2005/062857 A3

(51) International Patent Classification⁷:

A61N 1/18

(74) Agent: WHITE, John, P.; Cooper & Dunahm LLP, 1185 Avenue of the Americas, New York, NY 10036 (US).

(21) International Application Number:

PCT/US2004/042953

(22) International Filing Date:

22 December 2004 (22.12.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/532,363

US 24 December 2003 (24.12.2003)

- (71) Applicants (for all designated States except US): THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK [US/US]; West 116th Street and Broadway, New York, NY 10027 (US). THE RESEARCH FOUNDATION OF STATE UNIVERSITY OF NEW YORK [US/US]; Office of Technology Licensing and Industry, Relations N5002 Melville Library, Stony Brook, NY 11794-3369 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BRINK, Peter, R. [US/US]; 101 Dyke Road, Setauket, NY 11733 (US). CO-HEN, Ira, S. [US/US]; 23 Hawks Nest Road, Stony Brook, NY 11790 (US). ROSEN, Michael, R. [US/US]; 25 East 86th Street, New York, NY 10028 (US). ROBINSON, Richard, B. [US/US]; 67 Roosevelt Street, Cresskill, NJ 07626 (US). DANILO, Peter, Jr. [US/US]; 81 Stonybrook Road, Hopewell, NJ 08525 (US).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 25 August 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CREATION OF A BIOLOGICAL ATRIOVENTRICULAR BYPASS TO COMPENSATE FOR ATRIOVENTRICU-LAR BLOCK

(57) Abstract: A method of creating an atrioventricular bypass tract for a heart comprises growing mesenchymal stem cells into a strip with two ends, attaching one end of the strip onto the atrium of the heart, and attaching the other end of the strip to the ventricle of the heart, to create a tract connecting the atrium to the ventricle to provide a path for electrical signals generated by the sinus node to propagate across the tract and excite the ventricle.

